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09/678,579	10/03/2000	Daniel A. Japuntich	48317USA3H.027	7369

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[REDACTED] EXAMINER

LEWIS, AARON J

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/678,579	Applicant(s) DANIEL A. JAPUNTICH ET AL.
Examiner AARON J. LEWIS	Art Unit 3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Oct 15, 2001

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 33-71 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 33-71 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). _____

16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) Other: _____

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DETAILED ACTION

Double Patenting

1. Claims 33-71 of this application continue to conflict with claims 34-44 of Application No. 08/240,877; 34-77 of 09/440,619; 33-58,60-67 of 09/678,580; 33-54,56-61 of 09/678,488; 33-54,56 of 09/677,637; 33-36,38-62,64-66 of 09/677,636. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 33-56,63-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al.('516) in view of McKim ('618), for the reasons set forth on pages 2-6 of the Office action dated 07/06/01.

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As to claim 63, Simpson et al. as modified by McKim as discussed above with respect to claim 33, also teach the flexible flap being positioned on the valve seat such that the flap is pressed towards the seal surface in an abutting relationship therewith when a fluid is not passing through the orifice (page 2, lines 39-42 of Simpson et al. which expressly discloses that the valve flap (13) of fig. 2 is arranged to cover the orifice during inhalation). Since inhaled air enters the interior of the mask (fig.1) through the filter material of the body of the mask and exhaled air exits the interior of the mask of Simpson et al. via the exhalation valve (fig.2), there is no fluid is passing through the orifice (16) during inhalation. Therefore, the exhalation valve body is pressed towards the seal surface in an abutting relationship when (during inhalation) fluid is not passing through the orifice (16).

As to claims 64 and 65, the particular material from which the valve seat of Simpson et al. is made and the manner of making the valve seat can be arrived at through mere routine obvious experimentation and observation with no criticality seen in any particular material nor in the manner of making the seat. It is noted that Simpson et al. (page 2, line 39) discloses that the valve flap being made from a plastic material. It is submitted that it would have been obvious to make the valve seat from any well known material including plastic by any well known method including injection molding because it (the valve seat) would physically cooperate more effectively with a valve flap of the same material than one made from a different material.

As to claims 66-69, McKim (fig.3) teaches a valve seat which includes a planar flap retaining surface that has two securement points associated therewith, the flap retaining surface also being

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positioned on the valve seat to allow the flap to be pressed in an abutting relationship to the seal surface when fluid is not passing through the orifice (col.1, lines 60-72 and col.2, lines 23-28).

4. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. in view of McKim as applied to claims 33-56,63-69 above, and further in view of French patent (1,209,475) for the reasons set forth on pages 6 and 7 of the Office action dated 07/06/01.

5. Claims 58-62,70,71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson et al. in view of McKim as applied to claims 33-56,63-69 and further in view of French patent ('475) and Braun ('362).

The differences between Simpson et al. and claim 58 are a valve cover having a fluid impermeable ceiling that increases in height in the direction of the flexible flap from the first end to the second end and cross members that are disposed within the opening of the valve cover.

French patent ('475) teaches a valve cover having a fluid impermeable ceiling that increases in height in the direction of the flexible flap from the first end to the second end for the purpose of controlling the direction of fluid flowing through the valve (fig.4).

It would have been obvious to modify the valve (fig.2) of Simpson et al. to provide a valve cover because it would have provided a means for controlling the direction of flow of fluid therethrough as taught by French patent ('475) and which would also have prevented any exhaled gases from being blown upwardly against a wearer's glasses and fogging them.

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Braun, in an exhalation valve for a filtering face mask, teaches cross members (25) that are disposed within the opening of the valve cover for the purpose of protecting the valve against debris (col.4, lines 25-26).

It would have been obvious to modify the opening of the valve cover of Simpson et al. as modified by French patent ('475) to include cross members within its opening because it would have protected the valve against debris as taught by Braun.

As to claim 59, French patent ('475) teach a valve cover (figs.3 and 4) having an opening in the valve cover which is approximately parallel to the path traced by the second end of the flexible flap during its opening and closing.

As to claim 60, Simpson et al. as further modified by French patent ('475) teach a cover which is fully capable of performing the recited function of directing exhaled downwards when the mask is worn by a person.

As to claim 61, the cover of French patent ('475) as illustrated in figs.3 and 4 shows fluid impermeable sidewalls.

As to claim 62, the opening in the cover of French patent ('475) is at least the size of the orifice in the valve seat as illustrated in figs.3 and 4.

As to claim 70, the valve seat of Simpson et al. as modified by McKim and as further modified by Baum teaches a valve seat including a seal ridge (18 of Baum), onto which a seal surface is disposed, and a flap retaining surface, onto which the two securement points are located, the flap retaining surface being positioned on the valve seat to allow the flap to be pressed in an abutting

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relationship to the seal surface when a fluid is not passing through the valve (as discussed above with respect to claim 63 and with respect to claims 66-69).

As to claim 71, the two securement points of Simpson et al. as modified by McKim are located outside a region encompassed by the orifice (see fig.3 of McKim and fig.2 of Simpson et al.).

Response to Arguments

6. Applicant's arguments with respect to claims 58-62 have been considered but are moot in view of the new ground(s) of rejection.
7. Applicant's arguments filed 10/15/01 regarding claims 33-57,63-71 have been fully considered but they are not persuasive.

Applicant's arguments hinge on speculation of a possibility that valve flap (15) of Simpson et al. might "droop" away from the valve seat. There is no support in the disclosure of Simpson et al. which forms a basis for such a position. The mask body of Simpson et al. (fig.1) is disclosed as filtering inhaled air and releasing exhaled air through exhalation valve (fig.2). The mask of Simpson et al. is disclosed as being worn by persons in which the ambient atmosphere contains gaseous or vaporous contaminants (page 1, lines 24-28). In order for the mask of Simpson et al. to function as it is intended (and there is no reason to even suspect that it does not), the exhalation valve (fig.2) must remain closed until a wearer exhales; otherwise, gaseous or vaporous contaminants would leak into the interior of the mask body and be inhaled by such a wearer.

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Applicant is reminded that the language of each of claims 33 and 63 requires only that the valve flap be pressed towards the seal surface in an abutting relationship therewith when a fluid is not passing through the orifice. As discussed above with respect to claim 33, Simpson et al. teach such an arrangement during a wearer's inhalation period. That is, even if the valve flap (15) of Simpson et al. were to "droop" away from its seat during a period of time when a wearer is neither inhaling nor exhaling, there is at least A time period (i.e. inhalation) during which no fluid is flowing through orifice (16) simultaneous with the valve flap (15) being pressed in an abutting relationship with the valve seat.

The Castiglione Affidavit is based upon the stated assertion (e.g. page 2, paragraph #9) that the valve flap (15) is not pressed into abutting relationship with the valve seat when a wearer is neither inhaling nor exhaling. While such may be the case, there is no objective evidence (e.g. a physical test of the mask disclosed by Simpson et al.) to support such a conclusion. Consequently, the affidavit is not persuasive.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron J. Lewis whose telephone number is (703) 308-0716.

Aaron J. Lewis

December 30, 2001


Aaron J. Lewis
Primary Examiner